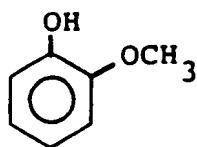


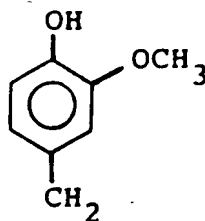
PHENOL  $C_6H_5OH$

FIG. 1



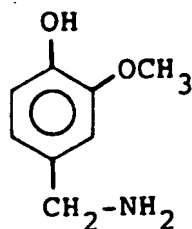
ORTHO-METHOXYPHENOL  $CH_3OC_6H_4OH$

FIG. 2



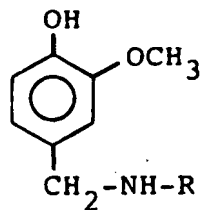
VANILLYL  $(CH_3O)(OH)C_6H_3-CH_2$

FIG. 3



3-METHOXY-4-HYDROXYBENZYLAMINE  $(\text{CH}_3\text{O})(\text{OH})\text{C}_6\text{H}_3-\text{CH}_2-\text{NH}_2$

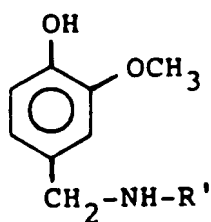
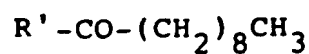
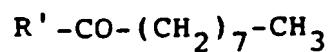
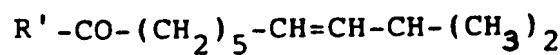
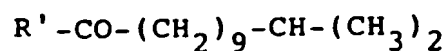
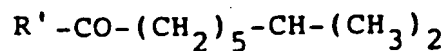
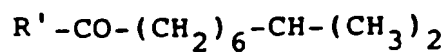
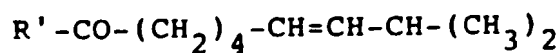
FIG. 4



where R is an organic hydrocarbon group

VANILLYLAMIDE  $(\text{CH}_3\text{O})(\text{OH})\text{C}_6\text{H}_3-\text{CH}_2-\text{NH}-\text{R}$

FIG. 5

STRUCTURAL FORMULACAPSAICINOID

CAPSAICIN

DIHYDROCAPSAICIN

NORDIHYDROCAPSAICIN

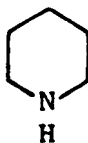
HOMODIHYDROCAPSAICIN

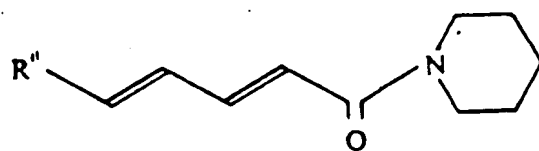
HOMOCAPSAICIN

NONANOIC ACID VANILLYLAMIDE

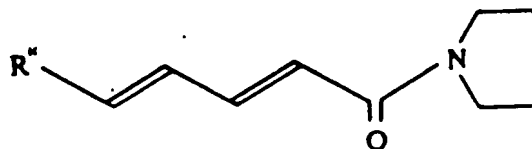
DECANOIC ACID VANILLYLAMIDE

## CAPSAICINOIDS

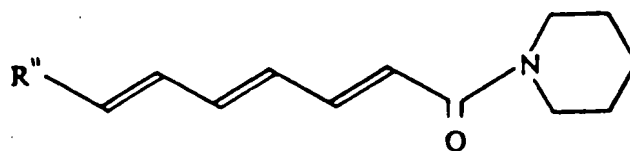
FIG. 6PIPERIDINE  $(CH_2)_5NH$ FIG. 7



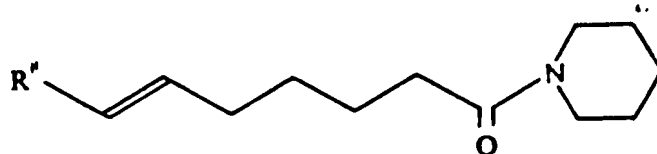
PIPERINE



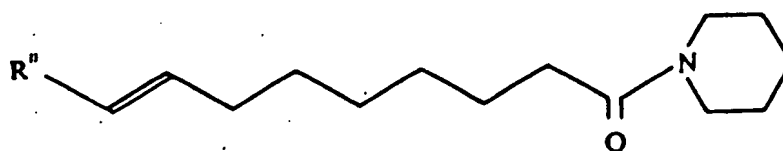
PIPERYLINE



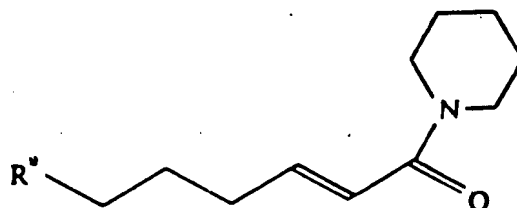
PIPERETTINE



PIPEROLEIN A

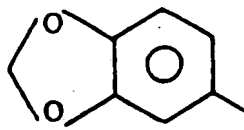


PIPEROLEIN B



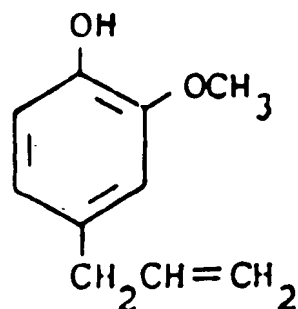
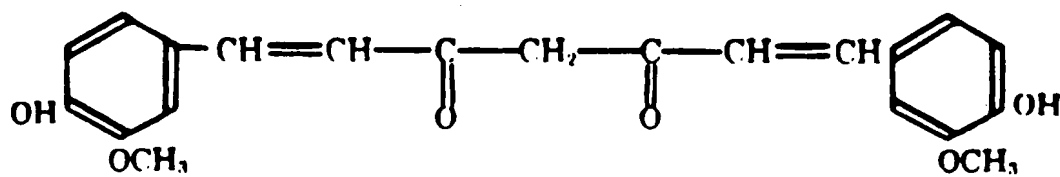
PIPERANINE

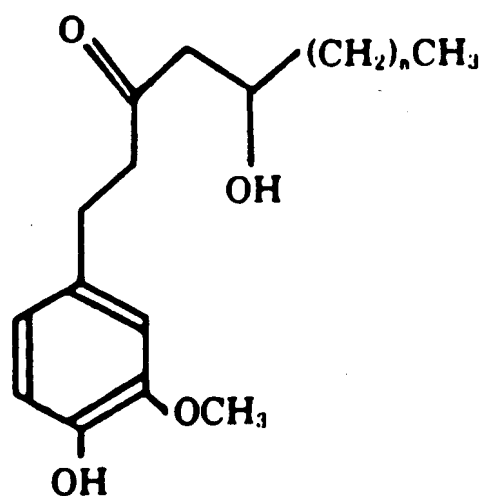
where R'' =



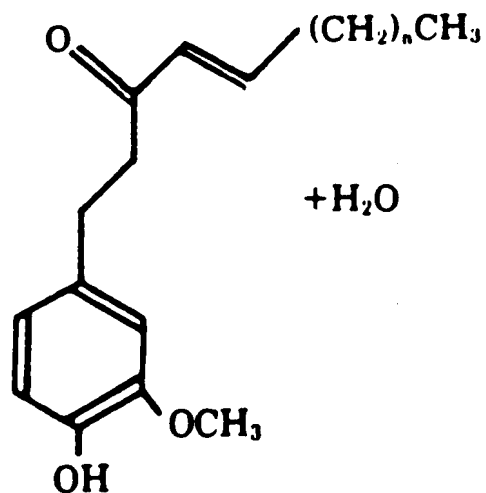
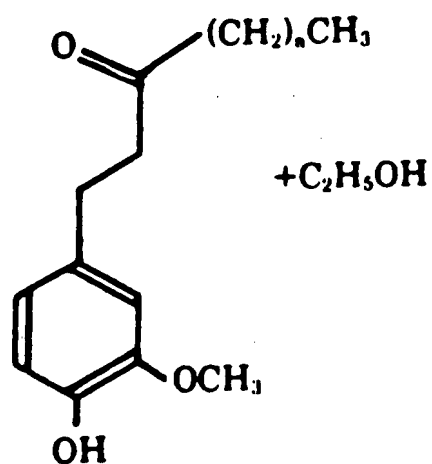
PUNGENT ALKALOID PRINCIPALS OF PEPPER

FIG. 8

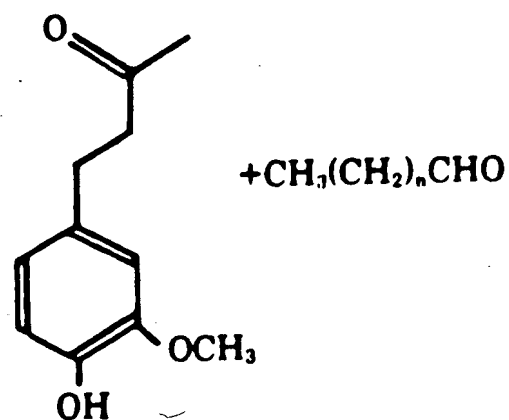
EUGENOL C<sub>10</sub>H<sub>12</sub>O<sub>2</sub>FIG. 9CURCUMIN C<sub>21</sub>H<sub>20</sub>O<sub>6</sub>FIG. 10



Gingerol

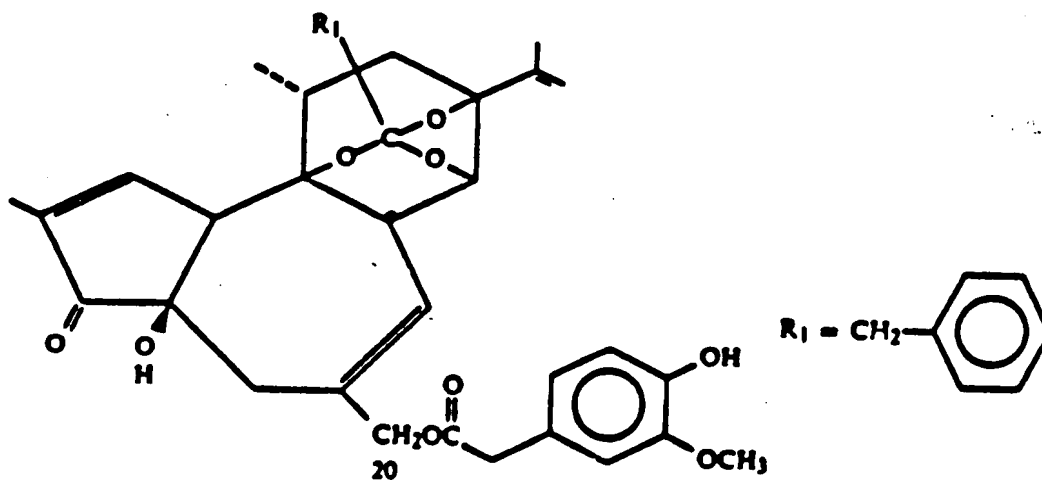
(where  $n = 4, 6, \text{ or } 8$ )Shogaol  $C_{17}H_{24}O_3$ 

Paradol

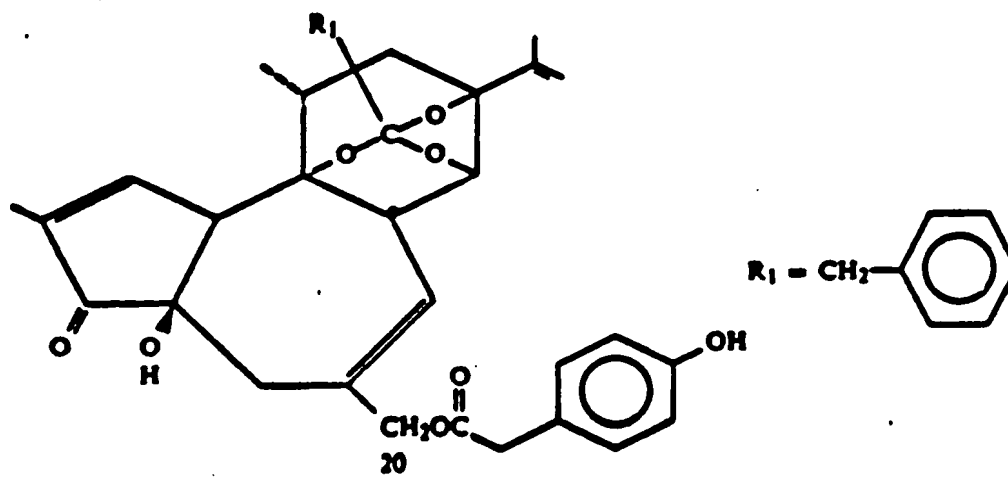
Zingerone  $C_{11}H_{14}O_3$ 

## GINGEROLS

FIG. 11



RESINIFERATOXIN

FIG. 12

TINYATOXIN

FIG. 13